Reproductive Quarterly

Newsletter of the Reproductive Health Program — Utah Department of Health

Fall 2001 — Number 16

In this newsletter:

Accutane® (Isotretinoin) and Pregnancy

By Debby Carapezza, F.N.P.

What is Accutane and why is it a problem in pregnancy?
Accutane (isotretinoin) is a medication prescribed for the treatment of "severe disfiguring nodular acne" that is unresponsive to standard therapies.[1] Over the past ten years the estimated number of prescriptions for Accutane given to women of childbearing age has more than doubled.[2] Unfortunately, Accutane is a known teratogen, that is, it is known to cause birth defects in exposed fetuses. According to the Food and Drug Administration's (FDA) Pregnancy Categories, Accutane is a category X drug, meaning, "…studies have demonstrated positive evidence of fetal abnormalities or risk which clearly outweighs any possible benefit to the patient".[3] Reports suggest that about 25 to 35% of exposed fetuses will suffer a malformation. These numbers do not reflect those abnormalities that may not be detectable at birth such as learning disabilities.[4] In the literature provided by Roche, the manufacturer of Accutane, the following contraindications and warnings appear:

"…about 25 to 35% of exposed fetuses will suffer a malformation."

> Although not every fetus exposed to Accutane has resulted in a deformed child, there is an extremely high risk that a deformed infant can result if pregnancy occurs while taking Accutane in any amount even for short periods of time. Potentially any fetus exposed during pregnancy can be affected. Presently, there are no accurate means of determining after Accutane exposure which fetus has been affected and which fetus has not been affected.[1]

The following major human fetal abnormalities have been related to Accutane exposure: central nervous system abnormalities including hydrocephalus, microcephaly and skull abnormality; external ear abnormalities; cardiovascular abnormalities; facial deformities and thymus gland abnormality, and others. Additionally, mental retardation has occurred, along with an increased risk of spontaneous abortion and premature births. (See Accutane, page 2).

Accutane (from page 1)

Since it is unknown whether or not Accutane is excreted in human milk and because of potential adverse effects, nursing mothers should also not receive Accutane.[1]

How many women are exposed to Accutane during pregnancy?

Despite efforts by the manufacturer, the FDA and prescribing providers, in 2000, the Organization of Teratology Information Services (OTIS) reported finding increases in the occurrence of fetal exposures among women of childbearing age who were receiving Accutane. Between 1995 and 1999, aggregate data from 16 teratology information services identified an average of 14 Accutane- exposed pregnant callers per year. But, from January to August of 2000, calls had been received from 28 Accutane-exposed pregnant women. Forty-three percent of these exposures were to Utah residents.[5] By the end of 2000, twelve Utah women reported being exposed to Accutane during pregnancy. As of August 2001, four such exposures have occurred among Utah residents.[6] While this is an improvement over the previous year, any exposure to Accutane during pregnancy is cause for concern.

What can be done to prevent Accutane exposure in pregnancy?

Roche has developed the Pregnancy Prevention Program[sm] in an effort to prevent possible exposure of pregnant women to Accutane. Highlights of this program are outlined below. However, all providers should contact Roche Pharmaceuticals for the complete Pregnancy Prevention Program[sm] kit prior to counseling and prescribing Accutane for any female of childbearing age.

Accutane is contraindicated in females of childbearing potential unless the patient meets all of the following conditions:[1]

- ✓ Must have severe disfiguring nodular acne that is unresponsive to standard therapies.
- ✓ Must be able to understand the instructions and is reliable in carrying them out.
- ✓ Must be able to understand behaviors associated with increased risk of pregnancy.
- ✓ Must receive both oral and written warnings regarding the risks of taking Accutane during pregnancy and of exposing a fetus to the drug.
- ✓ Must receive both oral and written information on the types of contraception available, the rates of possible contraceptive failure and the need to use two separate and effective forms of contraception simultaneously unless abstinence is the chosen method or the patient has undergone a hysterectomy and has acknowledged in writing her understanding of this information. One method must be either tubal ligation, partner's vasectomy, birth control pills, injectable/implantable birth control products or an IUD.

> *"...nursing mothers should also not receive Accutane."*

- ✓ Must have had a negative urine or serum pregnancy test with a sensitivity of at least 50 mIU/mL when the patient is qualified for Accutane therapy and must have had a second negative urine or serum pregnancy test on the second day of the next normal menstrual period or at least 11 days after the last unprotected act of sexual intercourse, whichever is later.
- ✓ Must have received instruction to join the Accutane Survey and have watched a videotape provided by Roche to her prescriber, that provides information about contraceptive methods, possible reasons for contraceptive failure, and importance of using effective contraception while taking teratogenic drugs.[1] The Accutane Survey by the Slone Epidemiology Unit at Boston University's School of Public health assesses compliance with the Pregnancy Prevention Program[sm] by tracking pregnancy rates, outcomes, patient awareness of risks and patient and physician behaviors related to Accutane therapy among women of childbearing age.[4]

The client may receive free initial contraceptive counseling and pregnancy testing from a consulting physician or family planning center. Roche will supply urine pregnancy test kits for female Accutane clients for the initial, second, and monthly testing during treatment with the drug. (See Accutane, page 3).

Accutane (from page 2)

They also supply an informed consent form that needs to be completed by the client, her parent/guardian, if applicable, and signed by the prescriber.

Effective contraception should be initiated at least one month prior to starting Accutane and should be continued for one month after discontinuing the drug. Roche's drug information states that microdosed progesterone preparations (minipills) may not be an adequate method of contraception while using Accutane. Because it is not known if Accutane decreases the effectiveness of hormonal methods of contraception, two methods of contraception must be used simultaneously. It is suggested that the client be given no more than a one-month supply of Accutane. At each monthly visit to renew the prescription, pregnancy testing should be repeated and counseling about contraception and behaviors that might place the client at risk for pregnancy should be reviewed. Patients should be cautioned not to donate blood during therapy and for one month after discontinuing the drug to prevent inadvertent Accutane exposure through transfusion to a pregnant woman. [1]

If all of the above are done, why are there still Accutane-exposed fetuses?

Unfortunately, not all of the above are done consistently. Some providers still fail to fully inform their clients of the risks involved or to perform all of the recommended pregnancy tests prior to initiating Accutane therapy. Clients fail to maintain the recommended two forms of contraception or they expose their fetuses to Accutane when restarting therapy on their own using leftover Accutane from previous prescriptions. Still, other women have initiated Accutane without appropriate counseling and pregnancy testing when they obtained their prescriptions out of the United States or used a friend's or relative's supply of the drug. [7]

All providers working with women of childbearing age need to be aware of the hazards of Accutane exposure in pregnancy. If providers encounter female clients of childbearing age on Accutane, the Pregnancy Prevention Program[sm] recommendations need to be fully reviewed with them. If it is determined that a client is not abiding by those recommendations, she needs to be warned of the consequences of becoming pregnant while on Accutane and referred back to the prescribing provider for in-depth counseling. This is especially important in working with teens who may quickly move from being abstinent to sexually active without benefit of any contraception, let alone the required two forms of contraception needed while on Accutane. If a client is pregnant and on Accutane, the consequences of fetal exposure need to be fully discussed with the client, along with her options, including possible termination, or appropriate referrals need to be made for in-depth counseling. Accutane should be prescribed only by providers competent in the diagnosis and treatment of severe nodular acne and experienced in the use of the medication and its teratogenic risks. Prescribers are encouraged to report all cases of Accutane exposures in pregnancy to either Roche Medical Services at 1-800-526-6367 or to the FDA MedWatch Program at 1-800-FDA-1088. Questions may also be directed towards the Utah Department of Health's Pregnancy RiskLine at 328-BABY (2229) or 1-800-822-BABY (2229) outside of Salt Lake.

References:

1. Roche U.S. Pharmaceuticals. (2001, August 31). Our Products: Accutane® (isotretinoin) Capsules: Complete Product Information. [On-line]. Available: http://www.rocheusa.com/products/accutane/pi.html.
2. Honein, M.A., Paulozzi, L.J., and Erickson, J.D. (2001). Continued occurrence of Accutane®-exposed pregnancies. Teratology, 64, (3), 142-147.
3. Medical Economics Company. (2000). Key to FDA Use-in-Pregnancy Ratings. In Physicians' Desk Reference, (54th ed., p. 345). Montvale, NJ: Medical Economics Data Production Company.
4. Meadows, M. (2001, March-April). The Power of Accutane: The Benefits and Risks of a Breakthrough Acne Drug. U.S. Food and Drug Administration. FDA Consumer Magazine. [On-line]. Available: http://www.fda.gov/fdac/features/2001/201_acne.html
5. Public Affairs Committee of the Organization of Teratology Information Services. (2000, September 20). Fetal Exposure to drug known to cause severe birth defects on the rise. [On-line]. Available: www.OTISpregnancy.org
6. J. Roberston, Teratology and Birth Defects Program, Utah Department of Health (personal communication, September 4, 2001).
7. Centers for Disease Control and Prevention. (2000, January 21). Accutane®-Exposed Pregnancies –California, 1999. MMWR Weekly, 49, (2), 28-31. [On-line]. Available: http://www.cdc.gov/mmwr/preview/mmwrht/mm4902a2.htm

Breastfeeding Promotion Efforts in Utah

By Christy Van Orman, RN, BSN, IBCLC

With one of the highest breastfeeding initiation rates in the nation, you might be surprised to learn that Utah needs an organization to promote, support, and protect a woman's right to breastfeed her baby. Utah mothers choose to initiate breastfeeding at a rate of 86.2 percent, but something happens during those first few months after birth. About half (47%) of mothers who start breastfeeding stop by the time the baby is six months of age.[1] Did they have trouble establishing a milk supply? Did they experience breast soreness? Did they return to work? The answers to these questions remain unclear. However, it is clear that mothers need support to overcome obstacles to successful breastfeeding. In a recent survey of Utah mothers, one woman wrote, "…it would have been nice to have more support and educational opportunities pertaining to breastfeeding. I stopped breastfeeding my first child because I was frustrated with it and didn't know what was normal or ways to make it easier…having support made a big difference with my second child."[2]

The Utah Coalition to Promote Breastfeeding (UCPB) is a group of nutritionists, nurses, mothers, doctors, lactation specialists and others dedicated to supporting nursing mothers in Utah and their babies. UCPB sponsors events and activities during the month of August each year for "Breastfeeding Month," and promotes breastfeeding year-round as the best infant feeding choice. All who wish to network with others in the promotion of breastfeeding are encouraged to join UCPB by contacting Jan Heins, WIC Breastfeeding Coordinator and Nutritionist, at 801-538-6960 or 1-877-942-5437. Recent and future activities and events sponsored by UCPB are summarized below:

Annual Conference - On August 9, 2001, UCPB sponsored a conference on the theme, "Breastfeeding: The Information Age." Amy Spangler, a national authority on breastfeeding, came to Salt Lake City to speak and answer questions about breastfeeding management. Through this and other conferences, UCPB works to bring experts in the field of breastfeeding to Utah.

Media Publicity - On August 17, 2001, a public service announcement promoting Breastfeeding Month appeared on KUTV.

Static Cling Distribution - UCPB developed window static clings to be distributed to health care facilities, community agencies, day care centers, and businesses that are supportive of breastfeeding. Members of the coalition are encouraged to promote the display of static clings in businesses and other establishments indicating support of breastfeeding and a willingness to provide a place for mothers to breastfeed their infants. The clings include a telephone warm line for mothers who have questions about breastfeeding.

> *"The AAP endorses breastfeeding as 'the preferred feeding for all infants...'"*

Web Site - UCPB is preparing to launch a web site to promote community events and provide education about breastfeeding. The Coalition also works to promote informed use of online breastfeeding information resources.

The American Academy of Pediatrics (AAP) endorses breastfeeding as "the preferred feeding for all infants…" and states, "exclusive breastfeeding is ideal nutrition and sufficient to support optimal growth and development for approximately the first six months after birth." Furthermore, the AAP recommends that "breastfeeding continue for at least 12 months, and thereafter for as long as mutually desired."[3] Through conferences and promotional activities, UCPB provides education and support for mothers who choose to breastfeed. As Utah develops resources for breastfeeding support, hopefully more mothers will overcome obstacles to breastfeeding and will have the satisfaction of nourishing their baby at the breast through the first year of life and beyond. (See Breastfeeding, page 5).

Breastfeeding (from page 4)

References:

1. Ross Laboratories. (1999). [Ross mother's survey]. Unpublished raw data.
2. Utah Department of Health. (2000). [What are Utah moms saying?]. Unpublished PRAMS data.
3. American Academy of Pediatrics Policy. (1997). Breastfeeding and the use of human milk: Policy statement # RE9729. Pediatrics, 100, (6), 1035-1039.

Is Back to Sleep Enough?:

Additional Sleep Safety Measures May Reduce Some Sudden, Unexpected Infant Deaths

By Melanie Wallentine, MPH

Sudden Infant Death Syndrome (SIDS) is the "sudden death of an infant under one year of age which remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of the clinical history".[1] SIDS still remains the leading cause of death for infants one month to one year of age in the US. Since the "Back to Sleep" campaign was launched in the United States in 1994 to encourage caregivers to place babies on their backs to sleep, the rates of SIDS deaths have decreased nearly 40 percent.[2] Although most professionals would agree that much of the decline is due to babies' supine sleeping position, some of the decrease in numbers is attributed to a recent shift in classification of cause of death for some sudden, unexpected deaths. For example, some deaths that were once classified as SIDS deaths are now being called positional asphyxia or undetermined as a cause of death. The medical examiner may declare positional asphyxia as the cause of death if it appears that something unintentionally obstructed the baby's airways, which is usually caused by an unsafe sleep environment. A death may be called undetermined if the medical examiner cannot tell for certain what caused the death; often, it may be difficult to ascertain whether the baby died of SIDS or positional asphyxia (State Medical Examiner of Utah, personal communication, August 29, 2001).

Though SIDS is still not predictable or preventable, implementing good sleep safety measures can make positional asphyxia largely preventable. Refraining from placing babies on adult beds to sleep and keeping soft items out of their sleeping area are two practices that may prevent sudden, unexpected positional asphyxia deaths**.**

The Consumer Product Safety Commission (CPSC) recently released a report that warns against placing babies in adult beds.[3] This study found that from January 1990 to December 1997, at least 515 baby deaths were linked with adult beds. The four biggest problems noted were:

- Accidental suffocation when an adult and the baby were co-sleeping
- Accidental suffocation when the baby became trapped between the mattress and another object
- Accidental suffocation from airway obstruction when the baby was face down on a waterbed
- Accidental strangulation in rails or other bed orifices that allowed the passage of the baby's body, but trapped the head.

(See Infant Death, page 6).

Infant Death (from page 5)

Many adults are not entirely aware of the dangers posed by placing babies on adult beds to sleep. Of the 515 deaths in this study, 121 were due to someone rolling on top of or near the baby while asleep. The CPSC hopes to alert breastfeeding mothers of this potential hazard and suggests putting the baby in a crib or bassinet after breastfeeding.

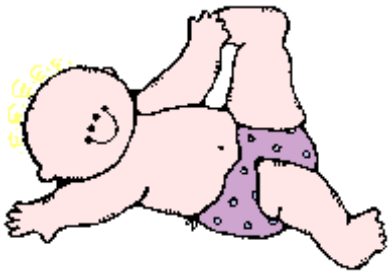
Soft bedding and any soft materials such as toys, quilts, comforters, sheepskin, balloons, and pillows also pose an accidental suffocation risk to an infant, as they make it difficult for the baby to breathe. The CPSC estimates that as many as 900 sudden, unexpected infant deaths per year are actually attributed to accidental suffocation caused by soft materials in the baby's sleeping area.[4] Though parents and other caretakers have been bombarded with this message since 1994, they have also been hit with a contrary message as consumers. Stores, catalogs and websites routinely displayed cribs made up with pillows, quilts and comforters. However, recently seven major retailers (Babies "R" Us, IKEA, JCPenney, Kmart, Lands' End, Sears and Target) have joined the CPSC in kicking off a safety campaign to promote safe bedding practices for infants. Consumers will no longer see cribs made up with soft bedding and, instead, will see many cautionary signs against using soft bedding for infants. Hopefully, this effort will reduce mixed messages parents have been receiving, and solidly promote sleep safety practices.

In 1998, there were 34 sudden, unexpected infant deaths in Utah from SIDS, positional asphyxia or undetermined causes, or 0.8 out of 1,000 live births.[5] Of the 34 deaths, 18 were determined SIDS deaths. In 1999, 30 infants died from SIDS, positional asphyxia or undetermined causes, or 0.7 out of 1,000 live births. Of the 30, 17 were determined SIDS deaths, with the remaining being due to positional asphyxia or undetermined causes. Though the overall numbers have decreased, risk-reduction measures for all causes of death are still critical. Risk-reduction and sleep safety practices include the following:

- Place the baby on his back to sleep. However, adequate "tummy time" is recommended when the baby is awake and being monitored to decrease the potential for flat spots on the head and assist with neuromuscular development.
- Avoid overheating and overbundling. The temperature in the baby's sleeping area should be about 70 degrees, with one thin blanket or preferably a sleeper outfit covering the baby.
- Breastfeed, if possible.
- Refrain from smoking if pregnant.
- Don't allow anyone to smoke near the baby.
- Remove all soft items from the crib, including toys, comforters, quilts, pillows, sheepskin, balloons and other soft items. If a blanket is used to cover the baby, place the baby's feet at the foot of the crib to prevent the blanket from covering the baby's face.
- Place the baby on a firm mattress to sleep, preferably in a crib. Never leave the baby alone on a waterbed, sofa, adult bed, pillow, beanbag or similar surface.
- Never sleep with the baby if you are extremely tired, or have been using alcohol, drugs or medicine that make it difficult to wake up.
- Instead of sleeping with the baby, consider putting the baby's crib next to your bed.
- Make sure there are no gaps or holes the baby can get stuck in.

Though the exact cause of SIDS is still unknown, there are recommended risk-reduction measures one can take. And, some sudden, unexpected deaths can be prevented with adequate sleep safety practices. (See Infant Death, page 7).

"Consumers will no longer see cribs made up with soft bedding..."



Infant Death (from page 6)

References:

1. Willinger, M., James, L.S., and Catz, C. (1991). Defining the Sudden Infant Death Syndrome (SIDS): Deliberations of an expert panel convened by the National Institute of Child Health and Human Development. Pediatric Pathology, 11, 677-684.
2. Task Force on Infant Sleep Position and Sudden Infant Death Syndrome. (2000). Changing concepts of Sudden Infant Death Syndrome: Implications for infant sleeping environment and sleep position. Pediatrics, 105, 650-656.
3. Consumer Product Safety Commission. (2001). CPSC warns against placing babies in adult beds. CPSC Document #5091. [On-line]. Available: http// www.cpsc.gov/cpscpub/pubs/5091.html
4. Consumer Product Safety Commission. (2000). Retailers join CPSC in promoting safe bedding practices for babies: Each year 900 SIDS deaths may be caused by soft bedding. News from CPSC. [On-line]. Available: http:// www.cpsc.gov/cpscpub/prerel/prhtml100/00078.html
5. Utah Department of Health (2001). Parent survey: Infant deaths due to SIDS and other causes, 1993-1999. [Electronic database]. Salt Lake City: Utah Department of Health.

ANNOUNCEMENTS...

Utah Perinatal Association Annual Conference

The 24th Annual Utah Perinatal Association Conference will be held October 25-26, 2001 at the Gathering Place at Gardner Village in West Jordan (1100 West 7800 South). Registration at the door is $125. For more information, contact Sharon Hartwell at 801-561-0134.

Maternal and Child Epidemiology Conference

The 7th Annual National Maternal and Child Epidemiology Conference will be held December 12-13, 2001 in Clearwater, Florida. Registration and more information can be obtained at www.uic.edu/sph/mchepi

JSI Trainings

To learn about upcoming trainings sponsored by JSI Research & Training Institute (for Region VIII Family Planning Training), log on to www.region8familyplanning.org

Accessing Utah Maternal and Child Health Data

To access Utah maternal and child health data, go to the Utah Department of Health's MatCHIIM website at www.health.state.ut.us/matchiim/main/ This site also contains teen pregnancy data.

Utah Department of Health

UTAH DEPT OF HEALTH CFHS
REPRODUCTIVE HEALTH PROGRAM
PO BOX 142001
SALT LAKE CITY UT 84114-2001

RETURN SERVICE REQUESTED

REPRODUCTIVE QUARTERLY is brought to you by the Utah Department of Health.

Please address questions or comments to:
Melanie Wallentine
PO Box 142001
Salt Lake City, UT
84114-2001
E-mail:
mwallent@doh.state.ut.us

Editor:
Melanie Wallentine

Assistant Editors:
Lois Bloebaum
Debby Carapezza

Look inside to find out about: